CLAIMS:

1.   A method of noise filtering an image sequence (VI), characterized in that the method comprises:

determining (11) statistics in at least one image of the image sequence (VI); and

5   calculating (14) at least one filtered pixel value (P_i') from a set of original pixel values (P_t,M_i) obtained from the at least one image, wherein the original pixel values (P_t,M_i) are weighted (13) under control ($12,\alpha$) of the statistics (11).

2.   A method as claimed in claim 1, wherein the step of calculating comprises:

10   weighting (13) the set of original pixel values (P_t,M_i) under control ($12,\alpha$) of the statistics (11) to obtain a weighted set of pixel values (P_t,N_i); and

furnishing the weighted set of pixel values (P_t,N_i) to a static filter, in which static filter the at least one filtered pixel value (P_t') is calculated from the weighted set of pixel values (P_t,N_i).

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3.   A method as claimed in claim 1, wherein the statistics (11) include a spatial and/ or temporal spread (S) of the set of original pixel values (P_t,M_i).

4.   A method as claimed in claim 3, wherein the spatial and/ or temporal spread

20   (S) is a sum of absolute differences, a given absolute difference being obtained by subtracting an average pixel value from a given original pixel value (P_t,M_i).

5.   A method as claimed in claim 1, wherein the set of original pixel values (P_t,M_i) include a central pixel value (P_t) and spatially and/or temporally surrounding pixel

25   values (M_i), wherein as a result of the noise filtering, the central pixel value (P_t) is replaced by the filtered pixel value (P_t').

6.   A method as claimed in claim 2, wherein the set of weighted pixel values (P_t,N_i) is obtained by taking for each pixel in the set of original pixels (P_t,M_i), a combination

of a portion α of the original pixel value (P_t,M_i) and a portion $1-\alpha$ of a central pixel value (P_t).

7.   A method as claimed in claim 1,

5   wherein the statistics (11) are furnished to a look-up table (12), from which look-up table (12) a control signal (α) is obtained, which control signal (α) controls the weighting (13).

8.   A method as claimed in claim 2,

10   wherein the at least one filtered pixel value $(P_t{}')$ is obtained by calculating (14) a median of the weighted set of pixel values (P_t,N_i).

9.   A method as claimed in claim 2,

        wherein the at least one filtered pixel value $(P_t{}')$ is obtained by calculating

15   (14) an average of the weighted set of pixel values (P_t,N_i).

10.   A method as claimed in claim 9, the method comprising:

        determining (41) a spatial spread (S_{spat}) calculated from spatially displaced original pixel values (P_t,M_i) in the set of original pixel values (P_t,M_i,P_{t1},P_{t2});

20   determining (42) a temporal spread (S_{temp}) calculated from temporally displaced original pixel values (P_t,P_{t1},P_{t2}) in the set of original pixel values (P_t,M_i,P_{t1},P_{t2}); and

        weighting (46) the spatially displaced original pixel values (P_t,M_i) under control (43) of the spatial spread (S_{spat}) and the temporally displaced original pixel values

25   (P_t,P_{t1},P_{t2}) under control (44,45) of the temporal spread (S_{temp}).

11.   A method as claimed in claim 10, wherein the weighted temporally displaced original pixel values (WP_1,WP_2) are divided (a) to lessen their weight in the filtering (47).

30   12.   A method as claimed in claim 10, wherein the temporally displaced original pixel values include two original pixel values (P_{t1},P_{t2}) from different fields in a same frame (F_0) and at least one original pixel value of a previous frame (F_{-1}).

13.   A method as claimed in claim 12, wherein filtered temporally displaced pixel values are used rather than temporally displaced original pixel values.

14.   A method of encoding (1) an image sequence (VI), wherein the image sequence (VI) is noise filtered according to a method as claimed in claim 1.

15.   A device for noise filtering an image sequence, the device comprising:
computing means (11) for determining statistics in at least one image of the image sequence (VI); and
filtering means (14) for calculating at least one filtered pixel value (P_i') from a set of original pixel values (P_i, M_i) obtained from the at least one image, wherein the original pixel values (P_i, M_i) are weighted (13) under control (12, α) of the statistics (11).

16.   A device for encoding (1) an image sequence (V1), the device comprising a device for noise filtering as claimed in claim 15.